1999
Polio Eradication Initiative
Mission Information Kit

US Agency for International Development

What is Polio and How Does It Spread?

- Polio is an infectious disease caused by the poliovirus.
- The virus is passed from person to person, through fecal-oral transmission, with most cases occurring in children under 5 years old.
- The virus infection starts in the intestine and can spread elsewhere in the body, causing an illness with symptoms resembling the flu.
- Once established, the poliovirus can enter the bloodstream and invade the central nervous system. In one in 200 cases, it can kill the nerve cells that activate the muscles.
- The dead nerve cells cannot be replaced; the result is usually life-long paralysis or in some cases, death.

USAID was the major external donor to the eradication effort in Latin America from 1987 to 1994.

In FY 1996, with congressional support, USAID began to take a more active role in the effort to wipe out polio in other regions of the world. USAID began its Polio Eradication Initiative (PEI) with a $20 million commitment to support activities in Africa, South Asia, and the new independent states of the former Soviet Union, all polio endemic areas.

Each year since 1996 USAID has received $25 million for the PEI, for a total of $95 million. Mission bilateral contributions increased the grand total to more than $100 million by September 1999.

Photo by Ellyn Ogden/USAID

Unsanitary conditions under which polio flourishes and spreads.

Global Partnership to Eradicate Polio

In 1988, the U.S. government joined with other nations in the World Health Assembly to adopt a global resolution to eradicate polio by the year 2000. USAID's approach is to achieve eradication in ways that strengthen the routine Expanded Program on Immunization (EPI) and contribute to the development of sustainable health care systems. USAID and its polio partners are working with host countries in this collaborative effort.

USAID provides technical assistance and financial support, administered primarily through grants from USAID/Washington to the World Health Organization (WHO), the United Nations Children's Fund (UNICEF) and other partners. USAID focuses on the five Polio Eradication Initiative (PEI) objectives articulated in the Initiative's results framework. USAID acts to strengthen partnerships, to enhance host country capacity to plan for and deliver quality polio vaccine, to conduct and increase demand for supplemental immunization, to improve surveillance and to collect information for program improvement.

WHO leads the polio eradication effort by coordinating the initiative and by providing technical leadership and training. In-country WHO polio eradication coordinators are responsible for working with host country EPI program managers to implement the eradication strategy, monitor progress, and work with Interagency Coordinating Committees (ICCs) to ensure that technical and financial resources are locally available.

Rotary International is a private organization with an elaborate volunteer network of more than one million Rotarians worldwide. Through its PolioPlus Program, Rotary supports advocacy, social mobilization for National Immunization Days (NIDs) and immunization campaigns in high-risk areas. Rotary International has raised over $500 million since 1985 to support polio eradication.

U.S. Centers for Disease Control and Prevention (CDC) provides epidemiologic, laboratory and programmatic assistance through the assignment and funding of polio eradication specialists to WHO and UNICEF offices. CDC provides funds (through UNICEF) to buy a portion of the oral polio vaccine used in NIDs.

The partnerships provide developing countries with funding, technical expertise and leadership, advocacy and volunteers.

USAID will continue to form new partnerships in the fight to eliminate polio.

Global Partnership (continued)

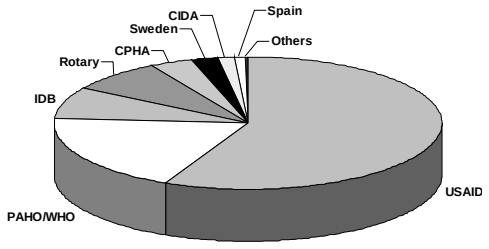
United Nations Children's Fund assists with strengthening and maintaining the cold chain and logistics systems, training, program development and social mobilization. UNICEF is a key player in polio vaccine procurement, forecasting and distribution.

Host country governments are among the most important partners in the success of polio eradication. They provide leadership, commitment, personnel, financial and other resources in the fight against polio. Other important partners include community groups, private voluntary organizations (PVOs), other bilateral donors and governments including Australia, Canada, Denmark, Japan, Sweden and United Kingdom.

Recent partners include **Voice of America** and **WORLDNET TV**, the **CORE** group of 35 U.S.-based NGOs and the **UN Foundation**. VOA has used its extensive network to support eradication efforts in nearly 50 countries to date, broadcasting in local languages. The CORE group focus is to strengthen community-based surveillance and mop-up activities in selected country programs. The UN Foundation will contribute funds and seek matching funds from other foundations and from wealthy individuals.

Donor Contributions

External Donor Contributions to Polio Eradication Efforts in Latin America, 1987-1996

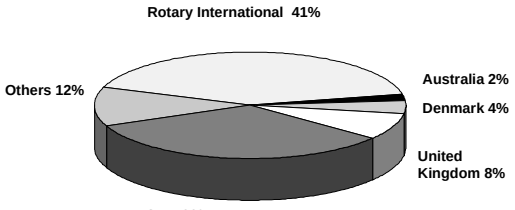


Total external donor expenditures for the period: $69,067,000

Source: Pan American Health Organization

Global Polio Eradication Partner Contributions 1994-1999*

(Total = US$212 million)



* Graph represents funds given directly to WHO through September 1999. Significant donor funding is also given directly to host governments and is not reflected in these totals.

** USAID distributes most of its funds through WHO or UNICEF.

Source: WHO

What is USAID's Commitment to the Polio Eradication Effort?

The U.S. Agency for International Development:

- Accepts the challenge of interrupting wild poliovirus transmission by the end of 2000, and global certification by 2005.
- Supports a legacy that goes beyond the elimination of polio and strives to enhance sustainable health care systems in developing countries.
- Offers technical assistance for planning, implementation, social mobilization, monitoring and evaluation of polio-related activities.
- Commits to polio eradication by strengthening routine immunization programs within the context of USAID's sustainable development objectives.
- Supports the development of surveillance systems at facility and community levels capable of detecting and reporting cases of polio and other childhood diseases, and strengthening health systems to rapidly respond to outbreaks.
- Helps strengthen the Expanded Program on Immunization by applying skills developed through the polio effort: vaccine forecasting, disease reporting and response, district level planning for routine health services and immunization campaigns, and community mobilization to reach a common goal.
- Raises awareness about the polio effort, routine immunization and disease control through advocacy, and participation in Interagency Coordinating Committees and technical fora.
- Supports research on and evaluation of issues pertaining to polio eradication, helping to fill knowledge gaps and improve program cost effectiveness.
- Encourages countries to conduct containment activities in accordance with the protocols developed by WHO and CDC.
- Provides annual reports to the U.S. Congress on PEI activities.

The Americas were declared polio-free in 1994; however USAID continues to support polio surveillance in the region and has expanded efforts for measles elimination. Funds for these activities are not included in the polio initiative.

How is USAID Targeting Its Efforts?

The Agency PEI strategy is designed to eradicate polio within the context of a strong, sustainable routine immunization system—an essential foundation for childhood immunization and basic curative and preventive services throughout the developing world.

The PEI Framework can be found in Annex II. The five elements of the strategy are as follows:

1 Build effective partnerships

USAID supports partnerships at the international, regional and national levels, particularly through Interagency Coordinating Committees.

2 Strengthen systems

USAID supports activities to enhance local capacity to provide high quality polio vaccine delivery. These activities include improved training, supervision, logistics and cold chain management, and program management for polio and other childhood illnesses.

3 Ensure effective supplemental immunization through National Immunization Days and mop-up campaigns

USAID funds are used to assist in planning and implementing supplemental polio immunization and intensive mop-up campaigns in high-risk areas.

4 Improve surveillance

USAID funds are used to strengthen existing surveillance systems and to develop new surveillance systems where needed to detect, report and respond to polio and other infectious diseases in the community.

5 Improve information collection and use

USAID supports data and information collection to monitor and evaluate eradication activities.

Polio Eradication Strategy

A simple but effective strategy that calls for:

- High levels of routine immunization
- National Immunization Days, a short-term activity designed to interrupt poliovirus transmission by immunizing all children under 5
- Surveillance systems and a laboratory network able to isolate and identify all polio cases
- Mop-up in high risk areas
- A certification process to verify regional polio-free status
- Containment of all existing sources of poliovirus to protect against accidental reintroduction of the virus into the population

Polio Eradication Strategy

Successful eradication is built around seven basic components:

- **High levels of routine immunization** require an infrastructure capable of delivering services, both in the public and private sectors. This requires trained providers and managers, a strong cold chain and logistics management system, and a demand for services generated by populations that are aware of the need for and benefits of immunization.

- **National Immunization Days** are a short-term activity designed to raise immunization levels quickly, over a short period of time. For eradication purposes, two rounds of NIDs, 4 to 6 weeks apart, take place each year for at least three years. Additional NIDs or subnational immunization days (SNIDs) may be added, based on surveillance, epidemiological data, and the extent of remaining endemic areas. At a minimum, all children under five, regardless of prior immunization status, receive the vaccine through a combination of fixed sites, mobile teams and household to household delivery. Special efforts and negotiation are required to reach children in war-torn areas.

- **Surveillance systems** adequate to detect, report and respond to all cases of AFP are essential in tracking down and eliminating pockets of potential transmission. The surveillance systems developed through the PEI lay the foundation for sustainable disease tracking systems at facility and community levels.

- Surveillance depends on the existence of an established **laboratory network** capable of analyzing specimens and providing timely responses to the field and to national health authorities. A functioning and efficient laboratory system is closely linked to all disease surveillance and is essential in protecting the public health. Laboratories must meet rigorous accreditation requirements to assure high quality, credible results.

- **Mop-up activities** typically follow a series of NIDs and target endemic and high-risk areas identified by the surveillance system. These intensive localized campaigns improve coverage and ensure that those children who are most difficult to reach are immunized, thereby eliminating the last routes of wild poliovirus transmission. The term “mop-up campaign” is frequently but incorrectly used to describe any household-to-household immunization effort. Such an approach might be used in advance of

Polio Eradication Strategy (continued)

mop-up, in specific situations, which include low routine immunization, incomplete NID coverage and lagging surveillance. For example, the only way to interrupt transmission in some places, especially in Africa, will be to carry out household-to-household immunization **during NIDs** and often extra rounds of normal NIDs as well, in advance of mop-up.

- Regional **certification** of polio-free status follows completion or establishment of all of the above by each country, and the absence of any virologically-confirmed cases of polio regionwide for at least a 3-year period.

- **Containment** of all hospital, laboratory and medical sources of poliovirus is the final step in the eradication process. After certification of eradication and a period of surveillance vigilance, immunization of children will finally end. Global immunity against polio will gradually decline and finally cease. At this stage a chance reintroduction of wild poliovirus into the community from a laboratory could have devastating effects of global proportions. For this reason, containment efforts begin in the pre-eradication phase, with the identification and inventory of all poliovirus sources and the institution of biosafety level 2 procedures. During the post-eradication phase (one year after the last virus is reported) biosafety level 3 is instituted and viruses may be transferred to central locations or rendered "noninfectious." Phase 3 is the post-polio immunization period, when biosafety level 4 procedures are put into place. (See Annex V for more detail.)

Glossary

Acute Flaccid Paralysis (AFP)
Acute refers to the rapid progression of the poliovirus, usually in 1 to 3 days. Flaccid (i.e., floppy) paralysis is the condition where polio is suspected.

Suspected polio
A case of suspected polio is defined as any child under 15 years of age with AFP, including Gullian-Barré syndrome, or any paralytic illness at any age when polio is suspected.

What Role Can USAID Missions Play?

Although USAID support for eradication is channeled mainly through international organizations such as WHO and UNICEF, USAID Missions have a significant role to play in promoting polio eradication, and coordinating and promoting sustainable immunization and disease surveillance programs in-country. Ways USAID Missions can contribute to the eradication effort are suggested below. See Annex II for more ideas.

Act as the Eyes and Ears of the Agency

- Since PEI grant funds are spread throughout the world, the Agency needs Missions to help track program implementation results and impact.
- Monitor eradication efforts and participate with partners on program evaluations.
- Act as ambassadors for the PEI—encourage governments and other partners to stay the course, to get the eradication job done.
- Missions can collect social mobilization materials, success stories, newsletters, etc., and send to Ellyn Ogden, PEI Coordinator, for inclusion in the archives and annual Polio Report to Congress.
- Missions can contact the USAID/Washington staff listed on page 25 for information and assistance to address concerns or provide clarification.

Participate in Interagency Coordinating Committees (ICCs)

- Participate in the national ICC. In meetings ask about the status of indicators, "silent areas" with minimal or no reporting/surveillance, social mobilization efforts to increase awareness and promote community-based surveillance. Missions can look for opportunities to expand the benefits and reach of polio funds during the planning process.
- Support coordination among host countries and donor partners to identify funding gaps and mobilize resources to develop sustainable programs.
- Encourage ICCs to expand their mandate to include broader child survival interventions, such as integrated surveillance and vitamin A supplementation combined with NIDs where appropriate.

Glossary

AFP Surveillance: A system to identify suspected polio cases. Its purpose is to reliably detect areas where poliovirus transmission is occurring or still likely to occur, and to focus supplemental immunization in those areas.

AFP surveillance consists of:
- Detecting, reporting and investigating suspected cases
- Collecting stool samples from reported cases and sending them for testing in good condition to an accredited laboratory
- Analyzing and using data for action
- Reporting findings
- Providing feedback and information to all levels and interested parties

Zero Case Reporting: All sentinel AFP reporting sites should report weekly, even if there are zero number of cases.

Role of Missions (continued)

Review Annual and Five-Year National Plans

- Evaluate annual plans and five-year plans to ensure that activities are adequate to meet PEI goals and fit within a sustainable development approach.
- Help increase country ability to forecast the financial, human and social mobilization resources needed for mass immunization campaigns, routine immunization and disease surveillance systems, particularly for acute flaccid paralysis.

Support Facility and Community-based Surveillance

- Ensure that facility-based surveillance systems are meeting reporting requirements and that laboratories are accredited and adequately staffed and equipped.
- A strong surveillance system is supported by community members, who participate as key informants. USAID Missions in project areas can promote community-based surveillance and provide support for advocacy and social mobilization efforts.
- Encourage the development of a "seamless surveillance system" that covers all levels, from community to national surveillance of potential polio cases.
- Ensure the use of surveillance data to identify areas needing additional immunization and mop-up.
- Look for opportunities to build on the PEI surveillance system to include other important diseases.
- Encourage greater community participation and involvement of local NGOs.
- Assist organizations such as Rotary International to mobilize communities and private sector resources.

USAID partnerships with the private sector are enhancing the eradication effort. In Zambia, Coca-Cola™ developed a "fast chain" to load vehicles for transporting vaccines to rural districts. The DeBeers Foundation in Angola supported radio spots and provided armbands and aprons for health workers during NIDS. Nestle™ in Nigeria provided armbands and other advocacy materials in support of eradication.

Glossary

The Expanded Program on Immunization (EPI) is a global effort that began in 1975 to combat the death and disease burden from the 6 major vaccine-preventable diseases: diphtheria, pertussis or whooping cough, polio, tetanus, measles and tuberculosis.

National Immunization Days (NIDs) for polio eradication involve organizing two rounds of highly visible, intensive immunization days a year, 4 to 6 weeks apart, over a period of at least 3 years. NIDs target all children under five, regardless of prior vaccination status.

Oral Polio Vaccine (OPV) is the only vaccine that can be used for eradication purposes. OPV is inexpensive, easy to administer and offers excellent intestinal immunity.

Role of Missions (continued)

Support Cold Chain Systems

- Encourage periodic assessments of cold chain equipment.
- Upgrade logistics and cold chain management and maintenance capability to ensure reliable and sustainable immunization, even after polio is eliminated.
- Assure that vaccine vial monitors (VVMs) are part of specifications for all OPV procurements, regardless of source. VVMs are under development for other vaccines.

Support USAID Research, Evaluation and Implementation Efforts

- Countries with hard-to-reach populations will need more specialized attention as the eradication effort advances. USAID/Washington has technical and financial resources to help identify problems, to conduct research and evaluation, to develop surveillance approaches and to promote communication and advocacy efforts. Missions can draw on these resources for a variety of activities. The other polio partners can also be contacted for assistance.
- Ensure that lessons learned are used and adapted in other programs. Take advantage of logistics and procurement models, communications and participatory community-based strategies to promote and support other program efforts.
- Provide country clearance for PEI teams. When partners identify endemic areas that need special research, evaluations or assessments, Missions can help by providing country clearances and facilitating implementation.

Report Mission Bilateral Funds Allocated to PEI

- If Missions are using Child Survival funds for polio-specific activities, please notify Ellyn Ogden and the regional backstop (p. 25) so that such funds can be attributed to the eradication effort.

In FY 98, USAID expanded its existing child survival and polio eradication activities through support of the CORE project. CORE NGOs and PVOs will promote and strengthen community-based surveillance in project areas and will provide support for mop-up activities leading to polio-free status certification. Mission involvement in this effort is critical.

Glossary

Vaccine Vial Monitor (VVM)
The VVM, developed with USAID support, changes color with heat exposure. Health workers use the VVM to verify that the vaccine is potent and usable.

Cold Chain
A network of trained staff, procedures and equipment, such as refrigerators, freezers and cold boxes or coolers that keep the heat-sensitive polio vaccine at the appropriate temperature.

Reverse Cold Chain
A network of trained staff, procedures and equipment, such as cold boxes, that keep the stool specimens of suspected cases cold until they reach a specialized laboratory.

USAID PEI Funding–FY 1996-1999

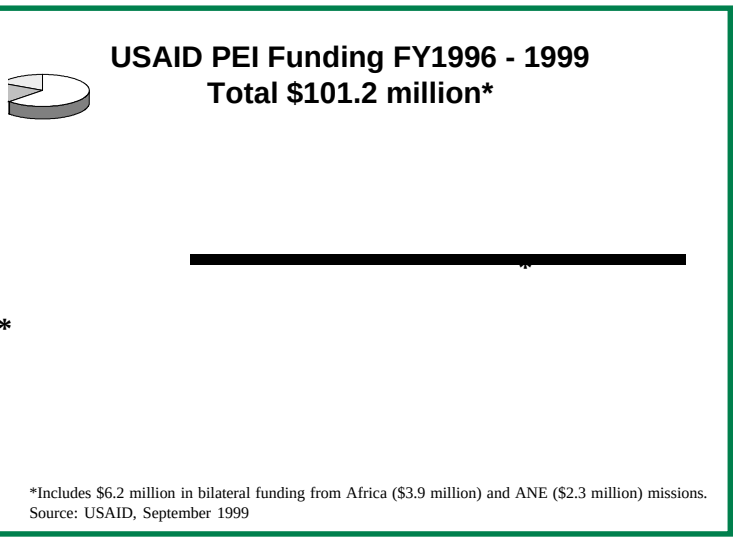
From FY 1996 to 1999, USAID contributed $95 million in congressionally directed funds for the PEI. USAID Missions have added $6.2 from bilateral funds to further support the Initiative. See Annex I for funding details.

- **$58 million in the Africa region**. These funds have supported Ministries of Health in polio eradication planning and strategizing, in planning and conducting National Immunization Days, for advocacy, social mobilization and communications efforts, and for establishing and strengthening surveillance systems.

- **$17 million through the USAID Global Bureau PHN Center**. Funds support research, monitoring and evaluation initiatives and specific activities in South Asia and the New Independent States (NIS) to improve polio surveillance and strengthen routine immunization systems. Funding has included efforts to identify barriers to effective immunization and case reporting, and dissemination of information and lessons learned on effective communication and training efforts.

- **$20 million to the ANE region**. Support has focused on India, where nearly half of all cases of polio occur. Grants to UNICEF and WHO are used to strengthen planning and training, improve quality and effectiveness of NIDs, and strengthen and establish polio surveillance and the laboratory network. USAID funds have also supported surveillance officers in India, Bangladesh and Nepal.

- **$6.2 million in bilateral funds**. These funds help to fill gaps in polio immunization coverage in countries where USAID works.



*Includes $6.2 million in bilateral funding from Africa ($3.9 million) and ANE ($2.3 million) missions.
Source: USAID, September 1999

Glossary

Mop-up Campaigns are targeted campaigns used in high-risk districts that have poor routine coverage or high incidences of polio, and border areas with endemic sectors.

As in NIDs, the OPV is taken household to household, with two doses administered a month apart to all children under five, regardless of prior immunization status.

Outbreak Response Supplemental immunization to children in a geographically limited "ring" around a suspected or confirmed polio case soon after the case is reported.

Zero Dose Children are those who have never been immunized against polio, neither during NIDs nor through the routine EPI.

What are the Costs, Savings and Benefits of Eradicating Polio?

- **Eradication Costs:** The World Health Organization estimates that middle and low income countries will require at least $800 million in external support from 1999 to 2005 to eradicate polio worldwide.

- **Low per Dosage Cost:** Polio vaccine costs less than $0.08/dose through UNICEF and about $1.00 to administer in a normal NID. The costs are considerably higher in difficult to reach areas and in war-torn countries.

- **Huge Global Savings:** Once polio is eradicated, global savings are estimated at over $1.5 billion a year, including about $230 million for the United States in vaccine costs alone.

- **Prevention of Paralysis:** The reduction in the global burden of disease and costs of care from the use of the polio vaccine has been substantial. Children who once were hidden at home or sent to the streets to beg now go to school and live productive lives, contributing to their families and communities.

Glossary

Interagency Coordinating Committees (ICCs) are composed of public and private sector agencies ideally led by a senior Ministry of Health representative. ICCs provide a forum and structure for donor collaboration, private sector partnerships, and host government involvement in polio eradication and sustainable immunization efforts.

The vaccine vial monitor, developed with USAID support, has helped to reduce vaccine wastage by up to 25%, saving an estimated $10 million annually. This simple, low cost device indicates when the heat-sensitive polio vaccine is no longer potent. VVMs are being added to other vaccines, which will bring about additional substantial cost savings.

Achieving Polio Eradication Will:

- **End human suffering from polio**. Eradicating polio will eliminate a major cause of disability and will reduce the social ostracism often experienced by those afflicted.
- **Improve routine immunization services and disease control programs**.
- **Enhance the ability of national health systems to:**
  - **Build a culture of prevention** by improving in-country capacity to plan, implement and maintain the effectiveness of public health efforts.
  - **Establish the infrastructure and mechanisms** to bring health services to those in hard-to-reach areas, including war zones.
  - **Maintain the cold chain** by proper servicing and timely replacement of cold chain equipment, essential to ensure vaccine potency.
  - **Improve surveillance systems and laboratory networks** and help build the infrastructures needed in the fight against polio and other infectious diseases, such as measles and tetanus.
  - **Improve communications**, especially between the community, district and central health authorities.
  - **Improve confidence in local and national governments** through working together for a common goal.
  - **Motivate health workers**—successfully immunizing all children and seeing the reduction in cases reinvigorates health worker commitment to the communities they serve.

It is expected that the polio eradication initiative will strengthen primary health care systems that will continue to contribute to improvements in global health long after polio is eradicated.

Progress is Being Made!

Achievements

- The number of cases of polio has declined by nearly 85%, from a high of 35,000 cases reported in 1988 to 6,300 confirmed in 1998. The geographic focus has also shifted. In 1988 polio was endemic in 140 countries on all continents. In 1999, polio is found in about 50 countries in the Indian subcontinent and sub-Saharan Africa.

- National Immunization Days reached more than 470 million children in mass campaigns in 74 countries in 1998. Over 134 million children in India were immunized in January 1999, the largest public health event in history.

- WHO has accredited 90 of the 133 laboratories in the Global Polio Laboratories Network. The rest are working on reaching accreditation standards by end of 1999.

- Vaccine vial monitors, developed through USAID support, are a component part of all polio vaccine used in the PEI, and have already saved hundreds of thousands of dollars in vaccine costs.

- A ceasefire negotiated in the DR Congo enabled the first NID to take place throughout the entire country in August 1999. The next NID is planned for September 1999.

Global Annual Reported Polio Cases 1988-1998

*Acceleration of surveillance results in more cases reported.
Source: WHO as of August 1999.

Glossary

Polio-free Certification
Certification requires that a region remains polio-free for at least three years, according to agreed upon criteria. An independent regional certification commission grants this status.

Polio-free Status
Countries certified as polio-free have virological and epidemiological evidence of having eliminated the circulation of indigenous wild poliovirus.

Progress is Being Made! (continued)

- Improvements in surveillance are taking place in most countries, but are particularly impressive in India and Nigeria. In India, improvements occurred immediately after AFP surveillance medical officers were deployed in 1997-98. In Nigeria, newly placed regional surveillance officers were responsible for a dramatic increase in surveillance quality.

- An extensive inter-regional mop-up immunization event took place in Iran, Iraq, Syria and Turkey in 1998, designed to eliminate the chance of cross-border virus transmission.

- Much of the success of the PEI to date is the result of collaborative planning by the many partnerships created, as well as the financial and technical resources they are able to provide.

- The Voice of America and WORLDNET TV have mobilized communities through radio and television broadcasts in local languages in more than 50 countries. In September 1999, VOA will have broadcast 1,500 polio messages.

- Peace Corps volunteers and Japan Overseas Cooperation volunteers are promoting community-based polio detection and reporting in ten countries to date.

Photo by WHO

We hope these children will be among the last to contract polio.

Priorities For 1999-2000

I. Reaching the Unreached

- **Improving Quality:** Every immunization event (NIDs, SNIDs, mop-ups, outbreak response, routine EPI) needs to be of high quality. This means making the vaccine accessible to every child under 5, and assuring that child caregivers accept and agree to immunization. Social mobilization messages need to reflect the delivery strategy (fixed-sites, household-to-household) and target those children and communities who have not fully participated. Myths, rumors and misinformation about the vaccine need to be preempted and openly addressed. Using data more effectively, recognizing who is missed and why is critical for careful planning, especially at district and subdistrict levels. Excellent supervision is essential to troubleshoot problems and to establish confidence in the effort. **Missions can promote the importance of the high quality approach in dialogue with government and partners and in ICC meetings, and can help to strengthen these elements in USAID project areas.**

- **Interrupting Virus Transmission**: In sub-Saharan Africa and parts of South Asia polio is still widely circulating. Extra rounds of high quality NIDs are being recommended in order to interrupt transmission and meet the year 2000 eradication goal, especially in countries with low routine EPI coverage. Where surveillance is well-established, the focus is shifting to specifically targeted mop-up. Where surveillance is poor, a household-to-household approach may be recommended to cover broader geographic areas, perhaps even nationwide. Everywhere that high quality NIDs (including extra rounds where warranted) and targeted mop-up have been done well, transmission has been interrupted within 24 months. **Anything Missions can do to support the strategies needed to interrupt transmission would be greatly appreciated! Please consider what you can do, especially in USAID project areas. Remember:**

  - 95-98% coverage during NIDs is needed for at least three years to interrupt transmission, especially in countries with large birth cohorts and less than 85% routine immunization coverage.

  - NIDs and mop-ups involve careful planning; identifying communities with special needs (floating villages, migrant and tribal groups, urban slums, religious or ethnic minorities); reaching the unreached (infants, children in the workplace, nomads); high knowledge and awareness; and dedicated commitment on the part of

Priorities For 1999-2000 (continued)

government, health workers and community. Some countries are adopting strategies such as marking houses and/or children (with gentian violet solution) to assure that all eligible children are reached.

- **Conflict Countries**: Countries in conflict require extra attention to assure that "days of tranquility" are agreed upon and vaccinators can safely reach all eligible children. Establishing effective surveillance in conflict countries is another challenge that partners will need to work together to solve. **Missions that are in or that border conflict countries can advocate for days of tranquility; ask about the situation in camps for internally displaced persons; encourage partnerships with appropriate NGOs active in the conflict areas.**

- **Cross-border Coordination:** Cross-border transmission of polio is a prominent issue. Coordinated and/or synchronized PEI activities between neighboring countries (such as NIDs, mop-up and surveillance) and prompt and accurate information exchange on outbreaks or suspected cases are needed to prevent the spread of virus into polio-free areas. **Missions could again work through ICCs to help establish the dialogue and mechanisms required.**

II. Accelerating Surveillance

- **Surveillance Officers** need to be trained and in place. Reporting sites, community key informants and communication channels need to be rapidly identified and functional. Africa is far behind other regions in establishing effective AFP surveillance.

- **NGO Participation:** In countries with poor access to health services or where there may be a social stigma attached to reporting cases of AFP, countries should consider enhancing their facility-based surveillance with more community-based case detection and reporting through NGOs.

- **Accreditation of Designated Laboratories:** Polio eradication relies on laboratory data to drive many program decisions. It is essential that every designated polio laboratory be accredited by 2000. It is equally essential that every laboratory be equipped with a dedicated telephone and fax and email connections to assure rapid data flow and feedback (e.g., arrival of specimens, outbreak notification, etc.).

Priorities For 1999-2000 (continued)

- **Missions, in project areas and in dialogue with health officials, can encourage the development and strengthening of surveillance and the laboratory network, each essential in maintaining public health.**

III. Declining and Stagnating Routine Coverage

Many countries are experiencing an alarming decline in routine immunization. The importance of routine immunization and AFP reporting are increasingly being promoted through NIDs and social mobilization and communication efforts. **Where possible, Missions could support and emphasize with governments and communities the importance of routine immunization to maintain the nation's health. Missions could promote this through participation in ICC meetings and activities. The development of national annual and 5-year plans to improve routine EPI; addressing barriers and constraints to poor performance; exploring the impact of health sector reform on immunization services; and increasing demand for immunization are specific activities that Missions can promote.**

IV. Advocacy

Advocacy: Many countries are becoming complacent after conducting three years of NIDs. Preliminary surveillance data show that while NIDs have been effective, in most cases they have not been good enough to interrupt transmission. The last years are the most difficult, and national governments need encouragement to "stay the course" and get the job done. All AFP cases, as well as any reporting problems, need to be openly and fully investigated without fear of "blame" for health workers, laboratory technicians or the community. Governments need to encourage honest assessments of coverage, rapid and honest reporting of laboratory results, and accurate identification of children or "special" groups that might have been missed. **Missions, as an interested donor working for a common cause, can help set the tone for advocacy-related discussions.**

V. Preparing for Certification and Containment

National policy makers should be aware of certification requirements and the data required for submission to the Regional Certification Commission. Likewise, countries should be aware of the steps needed for containment and initiate inventory activities in the near future. **Missions can help by asking about the status of these activities during ICC meetings and other encounters with key officials.**

Questions and Answers About Polio

Can polio really be eradicated?

Yes. Humans are the only host for the virus, therefore the prevention of transmission will result in the elimination of polio. When Drs. Jonas Salk and Albert Sabin developed effective vaccines to protect children, this became feasible.

What is the objective of National Immunization Days?

NIDs are used to immunize all children under 5 years of age with polio vaccine, without regard to previous immunization status. Each round of NIDs boosts immunity against the disease. Immunizing all children on the same day interrupts poliovirus circulation and creates a large pool of protected children.

How long will NIDs need to be held?

NIDs will need to continue until all threats of importation of wild virus from endemic areas ceases.

Why do all children under 5 need to be immunized on the same day?

Polio immunization interrupts poliovirus circulation by rapidly increasing both systemic immunity (formation of antibodies in the blood) and intestinal immunity (formation of antibodies in the lining of the gut). When intestinal antibody levels are raised, children become resistant to infection and will not spread the virus to others. Immunizing all children on the same day produces a large pool of immunity, leaving no place for the wild virus to take hold.

How many doses of OPV are needed to fully protect a child?

The efficacy of immunization depends on how well individuals respond to a vaccine. In industrialized countries, in generally healthy infant populations, three doses of OPV have provided high levels of protection and have quickly interrupted ongoing transmission. In developing countries, where children often suffer from diarrhea, nutritional deficiencies and other infections, many more doses of OPV, from 6 to 10, are needed to reach adequate levels of protection.

Questions and Answers About Polio (continued)

Why isn't control of the disease enough?

Control without eradication remains costly because even countries free of polio must continue to buy vaccines and carry out immunization to protect against disease importation from countries that are still polio-endemic.

If polio no longer exists in a country, why continue a campaign?

Campaigns continue until there is no longer any risk of importation. The poliovirus can easily cross borders and spread into areas considered polio-free. Wide coverage during NIDs helps reduce the risk of reestablishing transmission if the virus is brought into a polio-free area. Also, in the absence of good surveillance, it is not clear whether the virus has been eliminated. Program managers will err on the side of safety and recommend additional campaigns to ensure the eventual interruption of transmission.

When will immunization stop?

The decision to stop immunizing will be made after a period of surveillance vigilance, which will follow global certification of polio-free status. Such a period of vigilance could be about 5 years. Polio immunization will need to continue until about 2010, under current projections.

What is surveillance?

Surveillance is defined as the pinpointing of where and how the wild poliovirus is circulating. This involves detecting and reporting each case of AFP, and establishing an immediate response for each case. Surveillance systems are vital to the eradication effort and to the polio-free certification process. Stool samples are analyzed in the laboratory. If poliovirus is found, further tests are conducted to determine the exact strain and genetic sequencing of the virus. This lets the epidemiologists know where the virus originated.

Questions and Answers About Polio (continued)

What can community leaders and NGOs do to help?

Community leaders and NGO members can serve as "community guides" to help vaccinators in identifying households and children during NIDs and mop-ups. They can also help organize athletic events that dramatize a community's commitment to end polio, raise funds for the purchase of vaccine, conduct poster competitions or hold raffles. Anyone can become a "key informant" and be responsible for reporting cases of AFP. There is no limit to what can be done to participate in this global effort.

Does poliovirus persist in the environment?

No, it does not. The virus is readily inactivated by common disinfectants. Poliovirus remains viable in the laboratory at freezing temperatures for many years, in the cold for many months, and at room temperature for days to weeks. Survival of the virus in the environment is finite.

Do people continue to shed virus after immunization?

The vaccine virus can be found in the intestines for about 1 to 2 months after immunization, and excretion may be intermittent. Humans are the only reservoir. There is no long-term carrier state of poliovirus in people with good immune systems; however, prolonged excretion of vaccine-like strains has been found in immune-compromised individuals. USAID is funding research through Johns Hopkins University (Child Health Research project), in collaboration with CDC, to explore this issue further.

How does immunization interrupt virus transmission?

OPV successfully interrupts wild poliovirus transmission by producing both serologic and intestinal immunity. Because excretion of wild poliovirus is prevented or is brief in immunized persons, transmission dies out in highly immunized populations.

Questions and Answers About Polio (continued)

How will poliovirus in laboratories be contained after eradication?

The remaining poliovirus reservoir after eradication will be laboratory, hospital and research institution stock; and serious attention is being given to reducing this potential source of infection. WHO has prepared post-eradication guidelines for laboratory containment of the virus. Essential containment information can be found in Annex V.

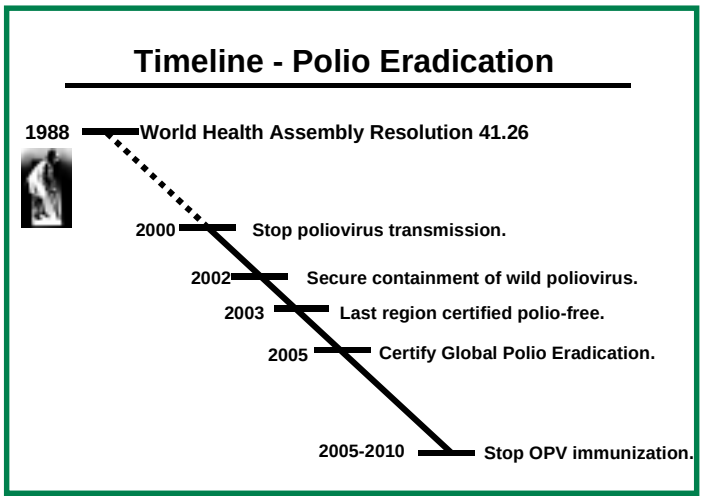
Should vitamin A or other antigens, such as measles, be included in NIDs?

USAID encourages including vitamin A supplementation during NIDs if the added logistics burden does not adversely affect provision of OPV. In most cases, countries could successfully add vitamin A in the second year of NIDs, but this needs to be decided on a country-by-country basis. Countries should consider how they will administer the second vitamin A dose and how provision of vitamin A will continue after NIDs cease. In countries with already existing vitamin A supplementation programs, it might not be feasible or appropriate to include vitamin A during NIDs.

USAID recognizes the importance of measles vaccination and the desire of governments to include measles vaccine during NIDs. In general, USAID does not encourage this. The PEI relies on volunteers during NIDs. Measles vaccine is injectible, and most volunteers are not trained to administer injections. They are also not aware of injection safety and the safe disposal of syringes and needles. In addition, the age groups differ for OPV and measles, thus the need to screen for appropriate age would add time and complexity to the task. Strengthening the routine EPI is the best way to protect against measles.

Polio Eradication Benchmarks/Timeline

- 1987 – USAID begins funding eradication efforts in Latin America.
- 1988 – World Health Assembly adopts global polio eradication goal within the context of strengthening the routine EPI at all levels.
- 1991 – Last polio case identified in the Americas.
- 1994 – The Americas certified polio-free.
- 1996 – USAID launches Polio Eradication Initiative. Strategy development and support for NIDs.
- 1997 – Approximately 100 countries participate in NIDs. Surveillance system and laboratory network development and strengthening.
- 1998 – Surveillance and mop up-activities accelerated. Increased participation of PVOs, NGOs and communities.
- 1999 – Intensified high quality NIDs, SNIDs and mop-up. Concentrated surveillance in pandemic areas.
- 2000 – World Health Assembly polio eradication target year. Western Pacific Region may be considered for polio-free status.
- 2003 – Regional certification of polio-free status (earliest projection).
- 2005 – Global certification of a polio-free world (earliest projection).
- 2007 – Containment (earliest projection).
- 2010 – End of polio immunization (earliest projection).



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